

02 (Amended) 11A designates a shaft housing which houses the shaft 11. The shaft housing 11A may be circular or rectangular or some other polygonal shape. The configuration of the chute 7 is such that where the plane of the chute 7 intersects the shaft housing 11A at point 7A, the shaft housing passes through the chute 7 at an angle. Where the shaft housing 11A intersects the chute at point 7A there may be sufficient chute width either side of the shaft housing 11A to allow the rock product emitted from the rotor to be transported by the chute 7.

Page 17, please replace the paragraph beginning with "The adjustable anvil 5" with the following paragraph:

03 (Amended) The adjustable anvil 5 is shown in two positions in figure 2. The first is shown by the lighter lines 5A and the other position is shown by darker lines 5B. The anvil includes cavities 9. The distance between the anvil end face 6 and the rotor is adjustable.

IN THE CLAIMS:

Please cancel claims 5 and 29-37 without prejudice or disclaimer of the subject matter thereof and amend claims 1-4 and 6-28 to read as follows:

- 04
1. (Amended) A rotary impact rock crusher for crushing rocks, comprising:
a crushing chamber housing; and
a rotor positioned in the crushing chamber housing, the rotor being configured to receive the rocks therein and to eject the rocks outwardly therefrom so that the rocks are crushed in a space between the rotor and the crushing chamber housing,

wherein an angle of the rotor with respect to a vertical direction is adjustable.

2. (Amended) A rock crusher as claimed in claim 1, wherein the angle of the rotor and an angle of the crushing chamber housing with respect to the vertical direction are adjustable independently of other crusher componentry.
3. (Amended) A rock crusher as claimed in claim 1, wherein the rotor and the crushing chamber housing are at a fixed position relative to each other so that the angle of the rotor and an angle of the crushing chamber housing with respect to the vertical direction are adjustable together.
4. (Amended) A rock crusher as claimed in any of claims 1 to 3, wherein the angle of the crushing chamber housing with respect to the vertical direction is adjustable to control rock fracture mechanisms in the rock crusher.
6. (Amended) A rock crusher as claimed in claim 1, wherein the crushing chamber housing includes an anvil for the rocks ejected from the rotor to impact on.
7. (Amended) A rock crusher as claimed in claim 1, wherein the rock crusher is configured such that, in operation, a rock wall is formed in at least part of an interior of the crushing chamber housing.

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8. (Amended) A rock crusher as claimed in claim 7, wherein the rock wall forms an ever-tightening corner when at least one of rock crusher component angles is adjusted from the vertical direction.

9. (Amended) A rock crusher as claimed in claim 1, wherein the rotor includes a drive shaft configured such that an angle of the drive shaft with respect to the vertical direction is variable independently of at least one other component in the rock crusher.

10. (Amended) A rock crusher as claimed in claim 1, further comprising an anvil, a position of the anvil being adjustable in the rock crusher.

11. (Amended) A rock crusher as claimed in claim 10, wherein the adjustable position of the anvil is a distance between the rotor and the anvil.

12. (Amended) A rock crusher as claimed in claim 10, wherein the anvil includes at least one cavity positioned therewithin.

13. (Amended) A rock crusher as claimed in claim 10, wherein the anvil includes a plurality of cavities therewithin.

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14. (Amended) A rock crusher as claimed in claim 12, wherein the anvil is configured such that, if an anvil surface wears through, the at least one cavity will be filled with at least a portion of the rocks ejected from the rotor.
15. (Amended) A rock crusher as claimed in claim 14, wherein further wearing of the anvil will regenerate an anvil impact surface.
16. (Amended) A rock crusher as claimed in claim 13, wherein the cavities have substantially adjacent vertices.
17. (Amended) A rock crusher as claimed in claim 10, wherein the anvil has a stepped face.
18. (Amended) A rock crusher as claimed in claim 17, wherein the anvil includes at least one cavity associated with the stepped face.
19. (Amended) A rock crusher as claimed in claim 10, wherein the anvil is located through an aperture in a crushing chamber wall.
20. (Amended) A rock crusher as claimed in claim 19, wherein the anvil is adjustable by altering the position of the anvil through the aperture in the crushing chamber wall.

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21. (Amended) A rock crusher as claimed in claim 10, wherein the anvil is adjustable from outside of the crushing chamber housing of the rock crusher.
22. (Amended) A rock crusher as claimed in claim 1, wherein the crushing chamber housing includes a plurality of anvils arranged to operate in combination with the rotor.
23. (Amended) A rock crusher as claimed in claim 1, further comprising an exit means for crushed rocks, the exit means projecting to one side of the rock crusher.
24. (Amended) A rock crusher as claimed in claim 23, further comprising a shaft housing for a shaft driving the rotor in the rock crusher, the exit means surrounding the shaft housing such that a plane of the exit means intersects with the shaft housing at an acute angle.
25. (Amended) A rock crusher as claimed in any one of claims 23 or 24, wherein the exit means is a chute and the chute is configured to vibrate as a result of operation of the rock crusher to urge the crushed rocks down the chute.
26. (Amended) A rock crusher as claimed in claim 25, wherein the chute is manufactured from rubber or plastic-based material.

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Amendments to the Claims

1. (Amended) A rotary impact rock crusher for crushing rocks, comprising: [having componentry which includes]

a crushing chamber housing[,]; and

a rotor [into which rock may be introduced and ejected therefrom] positioned in the crushing chamber housing, the rotor being configured to receive the rocks thereinto and to eject the rocks outwardly therefrom so that the rocks are crushed in a space between the rotor and the crushing chamber housing.

[the rock crusher characterised in that]

[the relative angles of at least one of the crusher components is adjustable]
wherein an angle of the rotor with respect to [the] a vertical direction is adjustable.

2. (Amended) A rock crusher as claimed in claim 1, wherein the angle of the rotor and [the] an angle of the crushing chamber housing with respect to the vertical direction are adjustable independently of other crusher componentry.

3. (Amended) A rock crusher as claimed in claim 1, wherein the rotor and the crushing chamber housing are at a fixed position relative to each other so that the angle of the rotor and an angle of the crushing chamber housing [are adjustable] with respect to the vertical direction are adjustable together.

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4. (Amended) A rock crusher as claimed in any of claims 1 to 3, wherein the angle of the crushing chamber housing with respect to the vertical direction [angle] is adjustable to control [the] rock fracture mechanisms in the rock crusher.
6. (Amended) A rock crusher as claimed in [any of claims 1 to 5] claim 1, wherein [which] the crushing chamber housing includes an anvil for the rocks ejected from the rotor to impact [in] on.
7. (Amended) A rock crusher as claimed in [any of claims 1 to 5] claim 1, wherein the rock crusher is configured [so] such that, in operation, a rock wall [forms on] is formed in at least part of [the] an interior of the crushing chamber housing.
8. (Amended) A rock crusher as claimed in claim 7, wherein the rock wall forms an ever-tightening corner when at least one of [the] rock crusher component angles is adjusted from the vertical direction.
9. (Amended) A rock crusher as claimed in [any previous] claim 1, wherein the rotor includes a drive shaft configured [so] such that [its] an angle of the drive shaft with respect to the vertical direction is variable independently of at least one other component in the rock crusher.

10. (Amended) [An anvil segment, configured to be used with an impact crusher which includes a crushing chamber housing and a rotor,

the anvil characterised in that the position of the anvil in the crusher is adjustable.] A rock crusher as claimed in claim 1, further comprising an anvil, a position of the anvil being adjustable in the rock crusher.

11. (Amended) [An anvil] A rock crusher as claimed in claim 10, wherein the adjustable position of the anvil is [the] a distance between the rotor [on the crusher] and the anvil.

12. (Amended) [An anvil segment for use with a rotary impact rock crusher, the anvil characterised in that] A rock crusher as claimed in claim 10, wherein the anvil [is configured to have] includes at least one cavity positioned therewithin. [within the anvil structure.]

13. (Amended) [An anvil as claimed in claim 13] A rock crusher as claimed in claim 10, wherein [there are] the anvil includes a plurality of cavities therewithin. [within the anvil structure.]

14. (Amended) [An anvil as claimed in any one of claims 11 to 13] A rock crusher as claimed in claim 12, wherein the anvil is configured [so] such that, if an anvil surface

wears through, [a] the at least one cavity will [fill] be filled with [rock emitted] at least a portion of the rocks ejected from the rotor.

15. (Amended) [An anvil] A rock crusher as claimed in [claims] claim 14, wherein [the] further wearing of the anvil will regenerate [the] an anvil impact surface.

16. (Amended) [An anvil] A rock crusher as claimed in claim 13, [claims 11 to 15] wherein the cavities have substantially adjacent vertices.

17. (Amended) [An anvil] A rock crusher as claimed in claim 10, [any one of claims 11 to 16] wherein the anvil [is configured to have] has a stepped face.

18. (Amended) [An anvil] A rock crusher as claimed in claim [18] 17, wherein [there is] the anvil includes at least one cavity associated with [at least one] the stepped face.

19. (Amended) [An anvil as claimed in any one of claims 12 to 18, wherein the anvil is the anvil claimed in claims 10 or 11.] A rock crusher as claimed in claim 10, wherein the anvil is located through an aperture in a crushing chamber wall.

20. (Amended) [An anvil as claimed in any one of claims 10 to 20] A rock crusher as claimed in claim 19, wherein the anvil is adjustable by altering the position of the anvil [is located] through [an] the aperture in the crushing chamber wall.

21. (Amended) [An anvil as claimed in claim 20 wherein the anvil is adjustable by altering the position of the anvil through the aperture in the crushing chamber wall.] A rock crusher as claimed in claim 10, wherein the anvil is adjustable from outside of the crushing chamber housing of the rock crusher.
22. (Amended) [An anvil as claimed in any one of claims 10 to 21 wherein the anvil is configured to be adjustable from out side of the crushing chamber of the rock crusher.] A rock crusher as claimed in claim 1, wherein the crushing chamber housing includes a plurality of anvils arranged to operate in combination with the rotor.
23. (Amended) [A plurality of anvil segments as claimed in any one of claims 10 to 22, arranged to operate in combination in a rock crusher.] A rock crusher as claimed in claim 1, further comprising an exit means for crushed rocks, the exit means projecting to one side of the rock crusher.
24. (Amended) [A rock crusher as claimed in claims 1 to 9, which includes an anvil as claimed in any one of claims 10 to 23.] A rock crusher as claimed in claim 23, further comprising a shaft housing for a shaft driving the rotor in the rock crusher, the exit means surrounding the shaft housing such that a plane of the exit means intersects with the shaft housing at an acute angle.

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25. (Amended) [A rock crusher as claimed in claims 1 to 9 and 24 which includes an exit means for the crushed rock which projects to one side of the crusher.] A rock crusher as claimed in any one of claims 23 or 24, wherein the exit means is a chute and the chute is configured to vibrate as a result of operation of the rock crusher to urge the crushed rocks down the chute.

26. (Amended) [A rock crusher as claimed in claims 1 to 9 and either of claims 24 and 25, the exit means is configured so that a shaft-housing for the shaft driving the rotor in the rock crusher is surrounded by the exit means so that the plane of the exit means intersects and the shaft housing at an acute angle.] A rock crusher as claimed in claim 25, wherein the chute is manufactured from rubber or plastic-based material.

27. (Amended) [A rock crusher as claimed in any one of claims 25 or 26 wherein the exit means may be configured to vibrate as a result of the operation of the rock crusher to urge the crushed rock down the chute.] A method of using a rock crusher for crushing rocks, the rock crusher comprising a crushing chamber housing and a rotor positioned in the crushing chamber housing, the rotor being configured to receive the rocks thereinto and to eject the rocks outwardly therefrom so that the rocks are crushed in a space between the rotor and the crushing chamber housing, the method comprising:

adjusting an angle of the rotor with respect to a vertical direction to control fracture mechanisms in the rock crusher.

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28. (Amended) [A rock crusher as claimed in the preceding claim wherein the chute may be manufactured from rubber, or plastic based material.] The method as claimed in claim 27, wherein the rock crusher further comprises an anvil and the method further comprises adjusting a distance between the anvil and the rotor to achieve desired fracture mechanisms.

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